JC10 Rec'd PCT/PTO 20 JUL 2005

| FORM P<br>(REV 5-  | PTO-1390 3393)   | U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE | ATTORNEY DOCKET NO.<br>101190-00049                |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  | ,<br>TRANSMITTAL LETTER ?  | TO THE UNITED STATES                                       | DATE: July 20, 2005                                |  |  |  |  |  |  |  |  |  |
|  | DESIGNATED/ELECTE CONCERNING A FILING  |  | u.s. appln. no_(ie known see 37 c.f.i.0)/5 42 / 88 |  |  |  |  |  |  |  |  |  |
|  | NATIONAL APPLICATION NO.<br>12003/001794   | INTERNATIONAL FILING DATE<br>September 2, 2003             | PRIORITY DATE CLAIMED<br>July 31, 2003             |  |  |  |  |  |  |  |  |  |
| TITLE OF INVENTION: REFRIGERATION SYSTEM OF AIR CONDITIONING APPARATUSES WITH BYPASS LINE BETWEEN INLET AND OUTLET OF COMPRESSOR |  |  |  |  |  |  |  |  |  |  |  |  |
| APPLICANT(S) FOR DO/EO/US: Young-Taek KIM (Gyeonggi-do, Korea)   |  |  |  |  |  |  |  |  |  |  |  |  |
| Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. A This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2.   | This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.  |  |  |  |  |  |  |  |  |  |  |  |
| 3. 🛛   | This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.  |  |  |  |  |  |  |  |  |  |  |  |
| 4. 🛛   |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. 🛚   | A copy of the International Application as filed [35 U.S.C. 371(c)(2)]  a. □ is attached hereto (required only if not transmitted by the International Bureau).  b. ☒ has been communicated by the International Bureau. |  |  |  |  |  |  |  |  |  |  |  |
| 6. 🛛   | c. is not required, as the application was filed in the United States Receiving Office (RO/US).  An English language translation of the International Application into English [35 U.S.C. 371(c)(2)]                     |  |  |  |  |  |  |  |  |  |  |  |
| 0. 23  | a. 🛛 is attached hereto.   |  |  |  |  |  |  |  |  |  |  |  |
| 7.   | b. has been previously submitted under 35 U.S.C. 154(d)(4).  Amendments to the claims of the International Application under PCT Article 19 [35 U.S.C. 371(c)(3)]  |  |  |  |  |  |  |  |  |  |  |  |
| "  | a. are attached hereto (required only if not transmitted by the International Bureau).   |  |  |  |  |  |  |  |  |  |  |  |
|  | b. have been communicated by the International Bureau.   |  |  |  |  |  |  |  |  |  |  |  |
|  | c.  have not been made; however, the   | ne time limit for making such amendments has NOT           | expired.   |  |  |  |  |  |  |  |  |  |
|  | d. have not been made and will not   | t be made.   |  |  |  |  |  |  |  |  |  |  |
| 8.   | An English language translation of the amendments to the claims under PCT Article 19 [35 U.S.C. 371(c)(3)].  |  |  |  |  |  |  |  |  |  |  |  |
| 9. 🖾   | An oath or declaration of the inventor(s) [35 U.S.C. 371(c)(4)].   |  |  |  |  |  |  |  |  |  |  |  |
| 10.  | An English language translation of the ar Article 36 [35 U.S.C. 371(c)(5)].  | nnexes to the International Preliminary Examination        | Report under PCT                                   |  |  |  |  |  |  |  |  |  |
| Iten   | ns 11 to 20 below concern other docume   | nt(s) or information included:                             |  |  |  |  |  |  |  |  |  |  |
| 11. 🛛  | An Information Disclosure Statement und  | der 37 C.F.R. 1.97 and 1.98; and Form PTO-SB08.            |  |  |  |  |  |  |  |  |  |  |
| 12. 🗆  | An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included.   |  |  |  |  |  |  |  |  |  |  |  |
| 13. 🖂  | A preliminary amendment.   | •  |  |  |  |  |  |  |  |  |  |  |
| 14.  | An Application Data Sheet under 37 CFF   | R 1.76.  |  |  |  |  |  |  |  |  |  |  |
| 15.  | A substitute specification.  |  |  |  |  |  |  |  |  |  |  |  |
| 16.  | A power of attorney and/or change of add   | dress letter.  |  |  |  |  |  |  |  |  |  |  |
| 17.  | A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.   |  |  |  |  |  |  |  |  |  |  |  |
| 18. 🛛  | A second copy of the published international application under 35 U.S.C. 154(d)(4).  |  |  |  |  |  |  |  |  |  |  |  |
| 19. 🔲  | A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).  |  |  |  |  |  |  |  |  |  |  |  |
| 20. 🖾  | Other items or information: Drawings -   | Figs. 1-20 (20 sheets); International Search Report        |  |  |  |  |  |  |  |  |  |  |

| U.S. APPLA 30. (PKNOWN) O SINTERNATIONAL APPLICATION NO.  |  |   |   |  |   | ATTORNEY DOCKET NO.  |          |           |  |
|---|--|---|---|--|---|--|----------|-----------|--|
| SEE 37 C. R   |  |   |   |  |   | 101190-00049   |          |           |  |
| The following fees are submitted:   |  |   |   |  |   |  |          | CULATIONS | PTO USE ONLY                             |
| 21. 🛛 Basic National Fee \$300.00   |  |   |   |  |   |  |          | 300.00    |  |
| 22.  Examinat  If International  and all claims s  All other situat   | Prelimina satisfy pro  | \$  | 200.00  |  |   |  |          |           |  |
| 23. Search Fe Search Fee (37 Application to International Search State All other situat   | CFR 1.44<br>the USPT<br>earch Repo   | \$  | 400.00  |  |   |  |          |           |  |
| All other situations \$500.00  TOTAL OF CALCULATIONS FOR 21, 22 and 23 =  |  |   |   |  |   |  |          | 900.00    |  |
| Additional fee listing or computer p 50 sheets of paper or  | orogram lis  |   |   |  |   |  |          |           |  |
| Total Sheets  | Total Sheets Extra Sheets  |   | Number of each additional 50 or fraction thereof (round up to a whole number) |  |   |  |          |           |  |
| 0 - 100 = 0 /50 =   |  |   | x \$250.  |  |   | x \$250.00   | \$       |           |  |
| Surcharge of \$130.00 for furnishing the oath or declaration later than \( \sum 20 \subseteq 30 \) months from the earliest claimed priority date [37 C.F.R. 1.492(e)]. |  |   |   |  |   |  |          |           |  |
| Claims  |  | Number Filed  |   | Number Extra   | Rate                                    |  |          |           |  |
| Total Claims  |  | 13 - 20 =   |   | 0  | x \$ 50.00                              |  | \$       |           |  |
| Independent Claims  | s  | 1 - 3   | 1 - 3 = 0   |  | x \$200.00                              |  | \$       |           |  |
| Multiple dependent claim(s) (if applicable) + \$360.00  |  |   |   |  |   |  |          |           |  |
| TOTAL OF ABOVE CALCULATIONS =   |  |   |   |  |   |  |          | 900.00    |  |
| Reduction by one-half for filing by small entity, if applicable. Verified Small Entity statement must also be filed. (Note 37 C.F.R. 1.9, 1.27, 1.28).                  |  |   |   |  |   |  |          | 500.00    |  |
|   |  | SUI   | втота   | L =  |   |  | \$       | 500.00    |  |
| Processing fee of \$ the earliest claimed   | 130.00 for   | r furnishing late [37 C.F.  | the Engl<br>R. 1.492  | ish translation later the (f)]. +                                    | e 🔲 20 🔲                                | 30 months from   | \$       |           |  |
|   |  | TOTAL   | NATION  | NAL FEE =  |   |  | s        | 500.00    |  |
| Fee for recording the   | ne enclose   | ed assignmen  | t [37 C.I   | F.R. 1.21(h)]. The ass<br>F.R. 3.28, 3.31). \$40                     | ignment mu                              | ist be   | s        |           |  |
|   |  |   |   |  | F F1                                    |  | \$       | 500.00    |  |
| TOTAL FEES ENCLOSED =   |  |   |   |  |   |  |          | unt to be | \$                                       |
|   |  |   |   |  |   |  | Char     |           | \$                                       |
| b. Please ch. A duplica c. The Com. Account  NOTE: Where an be filed a  SEND ALL CORR Customer No. 004 Arent Fox PLLC 1050 Connecticut A Suite 400                      | arge my I<br>tte copy o<br>missioner<br>No. 01-23<br>appropria<br>and grante<br>ESPOND<br>372<br>Avenue, I | Deposit According this sheet in its hereby au 300.  ate time limited to restore to ENCE TO: | ount No. s enclose thorized   | to charge any addition 7 C.F.R. 1.494 or 1.4 cation to pending state | nt of \$<br>nal fees wh<br>95 has not b | to the may be required to the may be required to the met, a petition of the may be required to the may be required | ed, or c |           | ayment to Deposit  1.137(a) or (b)) must |
| Washington, D.C.  | 20036-53   | 339<br>102) 639 491   | 0   |  |   |  |          |           | Orman                                    |